# **Washington Rural Health Assessment Project**

## **Economic Indicators**

## **Summary**

Economic and social status, adequate nutrition and housing, access to health care, and health status and outcomes are all closely linked (Ricketts et. al., 2001; Kawachi and Kennedy, 1997). In this monograph, we compare the economic status of Washington's towns and urban and rural counties. Among our key findings:

- Significant economic disparities exist between rural and urban Washington counties. Although rural counties benefited to some degree from the strong state economy in the 1990s, most rural areas lagged behind, and in some cases, lost ground.
- Small towns and isolated rural counties are the most economically vulnerable.
- Rural economies are more dependent on government and manufacturing employment.

The Washington Rural Health Assessment Project is a series of monographs on important trends influencing health status and health care access in rural Washington. These monographs are intended to supplement Washington State's Rural Health Plan. Other monographs will cover changes in demography, health care finance, health services infrastructure, and special topics such as aging and nursing home care. These monographs are available on the Office of Community and Rural Health, Health Care Access Research web site: <a href="http://www.doh.wa.gov/hsqa/ocrh/har/hcresrch.htm">http://www.doh.wa.gov/hsqa/ocrh/har/hcresrch.htm</a>.

For a more extensive comparison of labor and economic indicators using a different rural and urban classification system, see *A Labor Market and Economic Comparison of Rural and Urban Washington* prepared by the Washington State Department of Employment Security at <a href="http://www.workforceexplorer.com/admin/uploadedPublications/2962\_ruralurban.pdf">http://www.workforceexplorer.com/admin/uploadedPublications/2962\_ruralurban.pdf</a>

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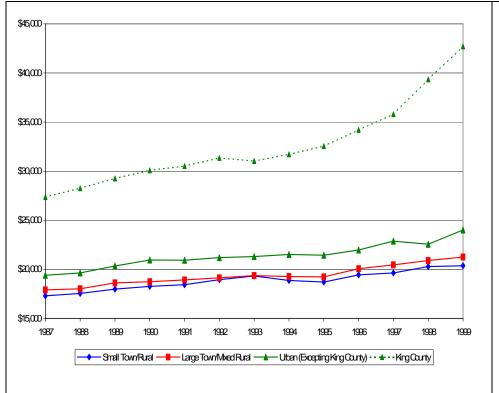


## **Summary of Economic Indicators of Rural Washington**

### Real per Capita Personal Income

Between 1987 and 1999, per capita personal income increased in all county classifications in Washington. But there were significant differences across counties in the rate of growth and the level of income. During this period, small town counties had the lowest real per capita personal incomes and the lowest rate of income growth (17.7%). Personal incomes in large town counties showed a slightly higher growth rate of 18.8% over the 12 years. Average personal income levels in urban counties are driven primarily by incomes in King County, so this analysis considers that county separately. Personal income in urban counties other than King County was higher than the other classifications and rose at a rate of 23.8% over the period. Personal income in King County was significantly higher than all other counties and rose at a rate of 56.1% during the 12 years, largely driven by the rise in technology industries.

Figure 1 Real per Capita Personal Income, 1987-99 (Constant 1996 Dollars)



**Per capita income** is total personal income divided by population. Personal income includes wages and salaries, government cash transfers (SSI, public assistance, retirement, and disability income, etc.), interest and dividend payments, and rental income. For this report, we converted data to constant 1996 dollars, using the implicit price deflator for personal consumption expenditures. County incomes are averages weighted for population.

Source: Washington State Department of Employment Security, 2003

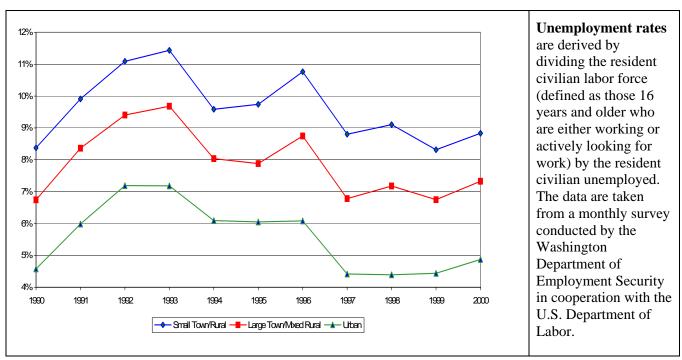
More information on income can be found at the following sites.

- Washington State Office of Financial Management: http://www.ofm.wa.gov/forecasting/sitemap.htm
- Washington State Employment Security Department Labor Market and Economic Analysis, Income, Earnings, and Wages: <a href="http://www.wa.gov/esd/lmea/download/download.htm">http://www.wa.gov/esd/lmea/download/download.htm</a>

## **Unemployment Rates**

Unemployment rates in rural counties track unemployment in urban areas. During the 1990s, rates in all areas were highest during the economic recession early in the decade. Rates dropped to their lowest level in 1999, and they began rising again in 2000. Although rural counties experienced some benefits from the period of economic growth, their unemployment rates consistently exceeded those of urban counties.

Figure 2 Unemployment Rates, 1990-2000



Source: Washington State Department of Employment Security

More information on unemployment rates can be found at the following sites.

- Washington State University Cooperative Extension Northwest Income Indicators Project (NIIP) <a href="http://niip.wsu.edu/washington/selindwa.htm">http://niip.wsu.edu/washington/selindwa.htm</a>

### **Poverty**

Poverty rates in rural Washington counties remain persistently higher in small town/rural and large town counties than in urban counties.

Poverty rates show the percent of population below the federal poverty level (FPL). Each year, the federal government establishes poverty designations based on the Consumer Price Index. These apply to the civilian, non-institutionalized population and vary with family size and age. In 1999, the poverty level for a family of four people was \$17,029. Poverty rates are calculated based on income data reported by

the Census Bureau. In 1999, Washington's poverty rates were highest in small town/rural counties (15.9%) and lowest in urban counties (9.9%).

Table 1 1999 Poverty Rates for Urban and Rural Counties

		Dominant Rural Urban Commuting Area (RUCA) of county is		
Percent of Population with Incomes at Different Levels of the Federal Poverty Line	Total State	Isolated and Small Rural	Large Town	Urban
50% FPL	4.6%	6.4%	6.1%	4.3%
100% FPL	10.6%	15.9%	14.0%	9.9%
200% FPL	25.9%	38.3%	33.9%	24.1%

Source: 2000 Census

The percent of persons below the federal poverty level in Washington decreased from 11% to 10.6% from 1989 to 1999. The gap between small town/rural and large town/mixed rural counties decreased during this period.

In 1999, Snohomish and Island Counties had the lowest poverty rates in the state at 6.9% and 7.0%, respectively, and Whitman County had the highest at 25.6%. Of the eight counties with a poverty rate below 10%, five are urban counties, two are small town/rural, and one is classified as large town/mixed rural. Of the 14 counties with poverty rates higher than 15%, six are large town, six are small town, and two are urban counties.

Table 2 Changes in Poverty Rates by County Classification, 1989 and 1999

		County Rural Urban Commuting Area (RUCA) is		
Population at 100% of				
FPL in	Total State	Isolated and Small Rural	Large Town	Urban
1989	10.9%	17.0%	14.7%	10.1%
1999	10.6%	15.9%	14.0%	9.9%
Change	3%	-1.1%	7%	2%

Source: 2000 Census

More information on how poverty rates are calculated is available at the Census Bureau web site: <a href="http://www.census.gov/hhes/www/poverty.html">http://www.census.gov/hhes/www/poverty.html</a>. Poverty estimates by county are available at <a href="http://www.census.gov/hhes/www/saipe/stcty/estimate.html">http://www.census.gov/hhes/www/saipe/stcty/estimate.html</a>.

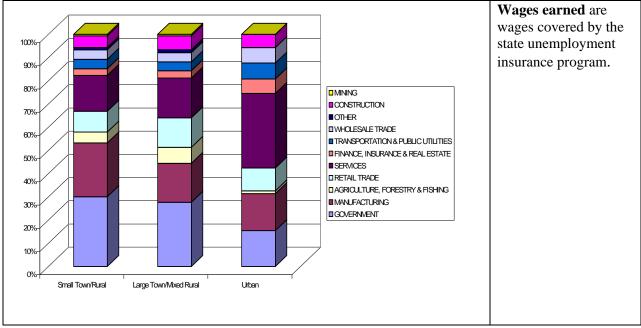
#### The Structure of Local Economies

Wages for government employees are the biggest drivers of economies of large town and small town counties, accounting for 28% and 30% of covered wages, respectively, in 2000. In contrast, only 15% of covered wages (those covered by the state unemployment insurance program) were paid to government employees in urban counties, about half the share as in small town and large-town counties.

The combined manufacturing, agriculture, forestry, and fishing sectors contributed an additional 28% of covered wages in small town counties and 24% in large town counties, compared with a 17% combined

contribution in urban counties. The services sector, which includes much of the technology business, is significantly larger in urban counties, accounting for 32.1% of covered wages.

Figure 3
Percent of Wages Earned by Employment Sectors, 2000



Source: Washington State Department of Employment Security

Between 1989 and 2000, wages in the government sector dropped in all county classifications. Service sector wages increased generally, with the largest increase in urban counties. This increase is attributed to the growth of technology business concentrated in urban areas.

Table 3
Percent of Total Average Annual Wages for Major Sectors, 2000

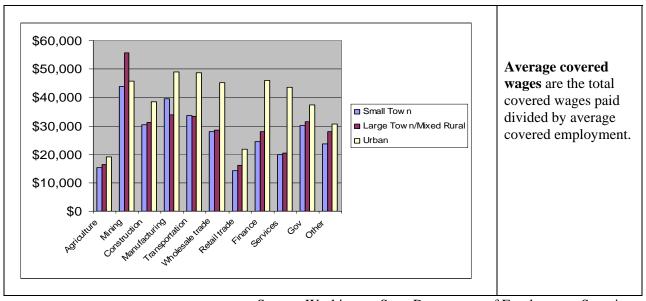
	Small Town/Rural		Large Town/Mixed Rural		Urban	
	1989	2000	1989	2000	1989	2000
Government	31.2%	30.0%	30.1%	27.6%	18.7%	15.4%
Manufacturing	25.3%	23.2%	21.0%	16.8%	25.1%	16.0%
Agriculture, forestry, fish		4.6%		6.9%		1.2%
		57.8%		51.3%		32.6%
Retail and wholesale trade	13.1%	13.0%	15.9%	16.71%	17.2%	16.5%
Services	9.7%	15.5%	12.8%	17.1%	18.2%	32.1%

Source: Washington State Department of Employment

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As the figure on the next page shows, the average salary paid is higher in urban counties in all sectors of employment except for the mining industry. While the average salary for mining in large town/mixed rural counties is high (\$55,666), this type of work accounts for only 0.62% of jobs.

Figure 4 Average Annual Covered Wages by Industry, 2000



Source: Washington State Department of Employment Security

More information on income and employment rates by sector can be found at the following sites:

- Washington State Office of Financial Management http://www.ofm.wa.gov/demographics.htm#econ
- Washington State Employment Security Annual Labor Market and Economic Report: Industry Employment and Wages—Annual: <a href="http://www.wa.gov/esd/lmea/download/download.htm">http://www.wa.gov/esd/lmea/download/download.htm</a>

#### The Role of Health Care in Rural Economies

The health care sector is a significant direct and indirect driver of local economies.

*Direct effects.* In many rural areas, the health care sector is one of the major employers, and in some cases, the single largest employer. It is difficult to isolate the magnitude of the health care sector's direct contribution without a local analysis. Although economic data on the health care services sector are available, they significantly underestimate the importance of health care to local economies. Many rural health services are delivered through public entities, such as public hospital districts, that are reported under the government sector.

These direct effects ripple through the economy. For example, hospital workers who spend their wages locally help create or maintain jobs in the places where they shop and buy services. Such multiplier effects are estimated using econometric analyses. As part of the Rural Landscape Project (Heineccius, 2000), the Washington State Office of Community and Rural Health developed an econometric model for estimating the effects of changes in the health sector on the rest of local economies. This model was

tested in Kittitas County, Grand Coulee, and Forks in 1999. The study found that each health sector job in the three communities generated an average of 0.57 additional indirect or support jobs in the community, and each dollar earned generated an average of about 47 cents of additional economic activity.

The Heineccius study did not directly calculate how much the health sector contributed to the total community economy. The landscape modeling reveals that a conservative estimate of the health care economy share for the three communities studied was between 10-15%.

*Indirect effects.* Any effort toward expanding or strengthening rural economies requires a well-functioning health system. National studies of business relocation decision-making have found that the quality of local health care is a major factor businesses consider when reviewing business relocation options (Doekson, 1996).

#### **Technical Notes**

**Definition of Rural:** For cases where sub-county data are not available, the Office of Community and Rural Health has classified counties by dominant RUCA codes. Counties are classified as predominantly urban, large town, or small town rural. Several other definitions of rural are available and used. For more detail, see: <a href="http://www.doh.wa.gov/Data/Guidelines/RuralUrban.htm#dominantRUCA">http://www.doh.wa.gov/Data/Guidelines/RuralUrban.htm#dominantRUCA</a>.

These codes are based on 1990 commuting data. They will be updated in late fall 2003.

Table 4
List of Counties by Rural Classification

Small Town/Rural	Large Town	Urban
Adams	Asotin	Benton
Columbia	Chelan	Clark
Ferry	Clallam	Cowlitz
Garfield	Douglas	Franklin
Jefferson	Grant	King
Klickitat	Grays Harbor	Kitsap
Lincoln	Island	Pierce
Okanogan	Kittitas	Snohomish
Pacific	Lewis	Spokane
Pend Oreille	Mason	Thurston
San Juan	Skagit	Whatcom
Stevens	Skamania	Yakima
Wahkiakum	Walla Walla	
	Whitman	

## **End Notes**

Annual Average Numbers in the Resident Civilian Labor Force, Washington Department of Employment Security Labor Market and Economic Analysis

Covered Employment and Payrolls in Washington State by County and Industry - Annual Average for 1999, Washington State Department of Employment Security Labor Market and Economic Analysis, 2000.

Doeksan GA. Health Care's Economic Impact on the Community. Stillwater, OK: Oklahoma Cooperative Extension Service 1996.

Heineccius, Lance, Rural Landscape Project Econometric Model Beta Test Findings: A Summary Report, Health Policy Analysis Program, University of Washington, July 2000.

Kawachi, I., Kennedy, B.P., 1997. Health and Social Cohesion: why care about income inequality? British Medical Journal 314 (7086), 1037-1040.

Kelly S, Hertman, C., Daniel M., 1997 Search for the biological pathways between stress and health. Annual Review of Public Health 18, 437-462.

Median Household Income Estimates by County: 1989 to 1998, Table 36, Washington State Office of Financial Management

Per Capita Personal Income For Washington Counties 1969-1997, Table 5, U.S. Department Of Commerce, Bureau of Economic Analysis.

Rickets, T., Randolph, R., Howard H.A., Pathman, D., Carey, T., 2001. Hospitalization rates as indicators of access to primary care. Health and Place 0, 1-12.

Small Area Income and Poverty Estimates: People of All Ages in Poverty, 1997 and 1998, U.S. Census Bureau, Housing and Household Economic Statistics Division, Small Area Estimates Branch, June 19, 2001.